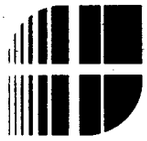

# Saint Agnes Medical Center

October 20, 1997

David Werdeger, M.D., M.P.H.
Office of the Director
Office of Statewide Health Planning and Development
1600 Ninth Street, Room 433
Sacramento, California 95814

Top 100 National Benchmark Hospital

Dear Dr. Werdeger,

On behalf of Saint Agnes Medical Center I would like to thank you for the opportunity to comment on the preliminary draft of the 1997 Heart Attack Mortality Study. We participate in the care of many patients who have suffered heart attacks, and we share your goals of improving the quality of hospital care for all California citizens.

National Quality Leader

If indeed your model, data and analyses are correct, we are certainly interested in doing all we can to examine our processes of care and determine those which result in the best outcomes. Since 1993, which is the most recent data included in your study, there have been many improvement efforts undertaken at Saint Agnes Medical Center regarding cardiac care. We have implemented a chest pain protocol in the Emergency Department that assures consistent care for each patient presenting there. We also have created a Cardiovascular Performance Improvement Committee and Action Team which has worked diligently over the past year to study and improve our process of caring for heart attack patients. This has resulted in the implementation of several clinical pathway protocols for our cardiac patients. Saint Agnes Medical Center is devoted to compassionate, high quality healthcare.

Excellence In Business Award Winner

Since receiving the preliminary draft of your findings, we have spent many hours trying to validate your model and reviewing the data that you used. We have performed coding validation studies on a sample of the records, engaged in detailed analysis of the statistical model, reviewed the variables used to predict mortality, and conducted an objective physician review of a sample of the death charts that were included in your study. As a result of our analysis, we have substantial concerns regarding the accuracy of your report.

Top Five Business Award Winner

- Review of coding practices revealed that Acute Myocardial Infarction may not have been the principal diagnosis on two of the records sampled.
- On every record sampled at least one comorbid condition and complication was identified that matched the secondary diagnoses in your Model B.
- Thirty one percent (31%) of sampled records indicated the patient was discharged alive to home. Although death occurred within thirty (30) days post discharge, we are unable to determine if the death was related to the AMI.
- Our coded data revealed that at least 49% of the sampled patients had congestive heart failure, whereas your model indicated that 27% of our patients had documented congestive heart failure.
- Patients who were transferred to an alternate level of care, i.e., home health, were included but according to the definition of the model, should not have been.
- A sample of the 157 medical records credited with a heart attack death were reviewed by a contracted physician to evaluate the quality of care provided to those patients. The majority of these patients had end-stage diseases, cardiac and otherwise, which precluded any heroics. All but three had a cardiologist involved in their terminal care or had a cardiology evaluation in the month

preceding the terminal event. The model suggests that it may have been the largest single contributor to AMI death; Do Not Resuscitate orders and/or "comfort care only" treatment modalities. With the inclusion of this variable the Saint Agnes expected mortality rating would be significantly higher, as over one-third of our patients in the study had "comfort care only" or Do Not Resuscitate (DNR) orders in the patient record. Thirty-seven percent (37%) of the records reviewed indicated comfort care measures, Do Not Resuscitate (DNR) and/or a living will document. These are life decisions that cannot be captured by an ICD 9 CM code number.

- A database used for a study of this type should be created with that purpose in mind. Data collection must include variables that are not currently included in the State mandated discharge record abstract and medical record coding practices must be standardized across all hospitals in the State in order to create a database that has any potential to support a model for quality comparisons.
- The risk-adjustment methodology is not sound and tested. As acknowledged by the State, the possibility that an adverse outcome was the result of a variable not currently in Model A or B does exist.
- Two variables, one in AMI with no prior admissions and one in the prior admission model, behave in an erratic manner. In one model, the above variables reduce the likelihood of death, while the same variable in the second model increases the likelihood of death. It is very abnormal that the same variable can reduce the likelihood of death in Model A while increasing the likelihood of death in Model B (variables PRCABG and SITEINF).

Due to the above-identified concerns with your study, please reconsider your plans to release this report to the public. Using coded data, which is intended for billing purposes, to assess quality of care is fraught with inaccuracies and problems. We recommend that future studies use data that are more appropriate for the evaluation of quality care.

Again, we applaud your efforts to improve the quality of care provided to the citizens of our great state. Please be assured that even though we have concerns with the accuracy of your report, we intend to continue to focus on the quality care our patients receive and to make improvements wherever possible.

Sincerely,

Sister Ruth Marie Nickerson, CSC

Sister Ruth Marie Nickerson, C.S.C.
President and Chief Executive Officer